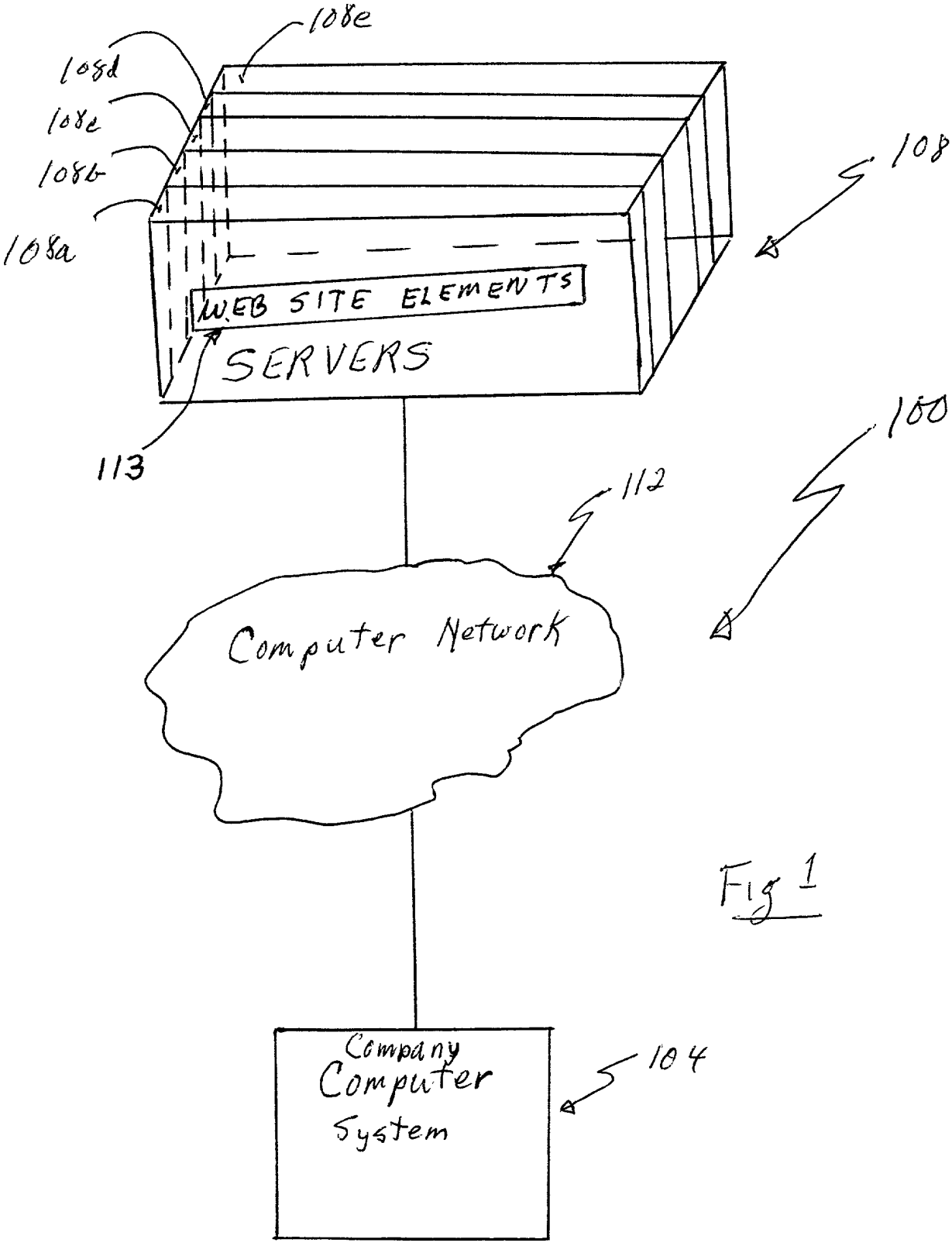

108e
108d
108c
108b
108a
108
WEB SITE ELEMENTS
SERVERS
113
100
112
Computer Network
Company Computer System
104

Fig 1

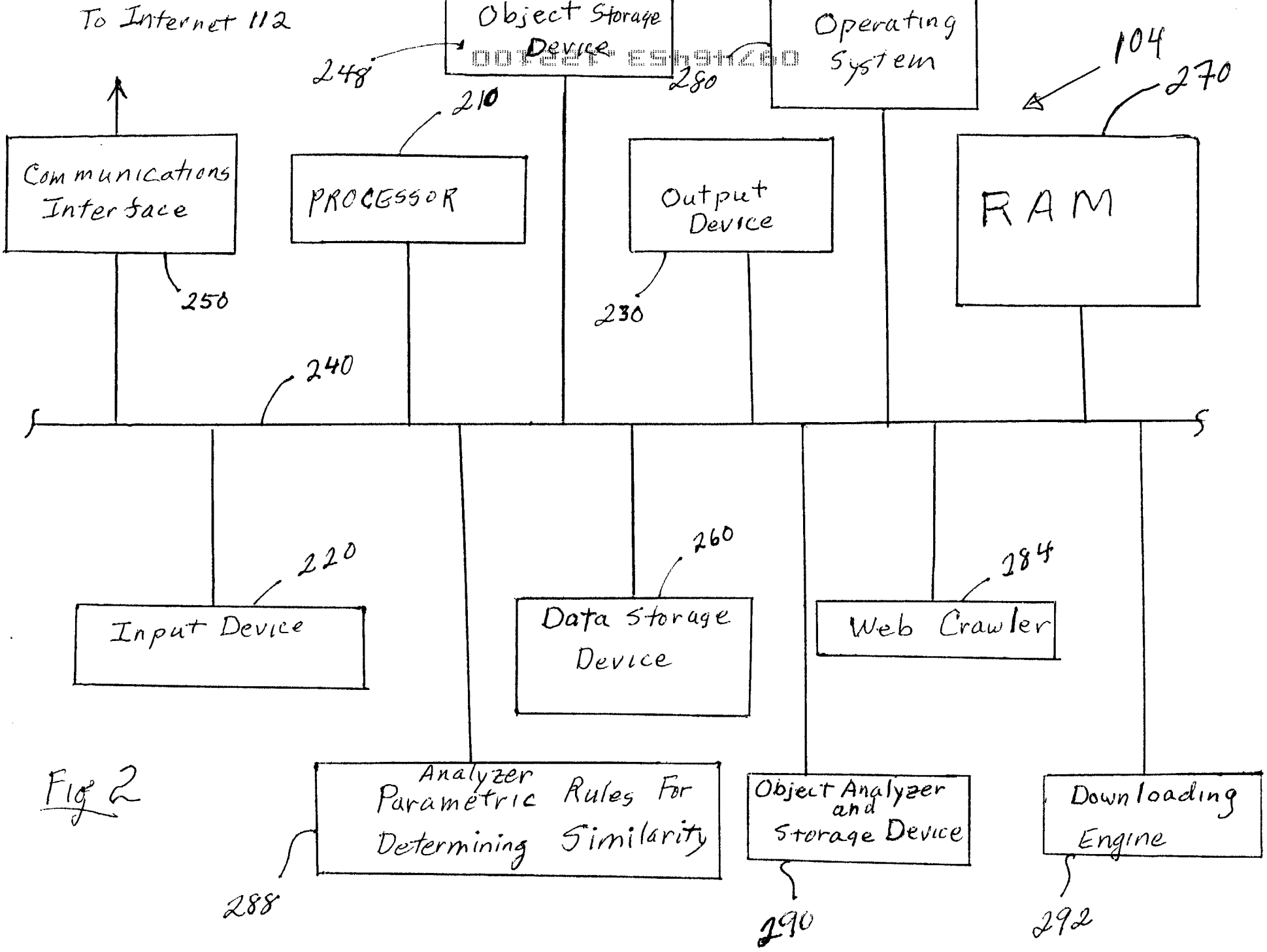

To Internet 112
Object Storage Device
Operating System
104
270
248
280
210
Communications Interface
PROCESSOR
Output Device
RAM
250
230
240
220
260
284
Input Device
Data Storage Device
Web Crawler
Analyzer
Parametric Rules For Determining Similarity
Object Analyzer and Storage Device
Downloading Engine
288
290
292

Fig 2

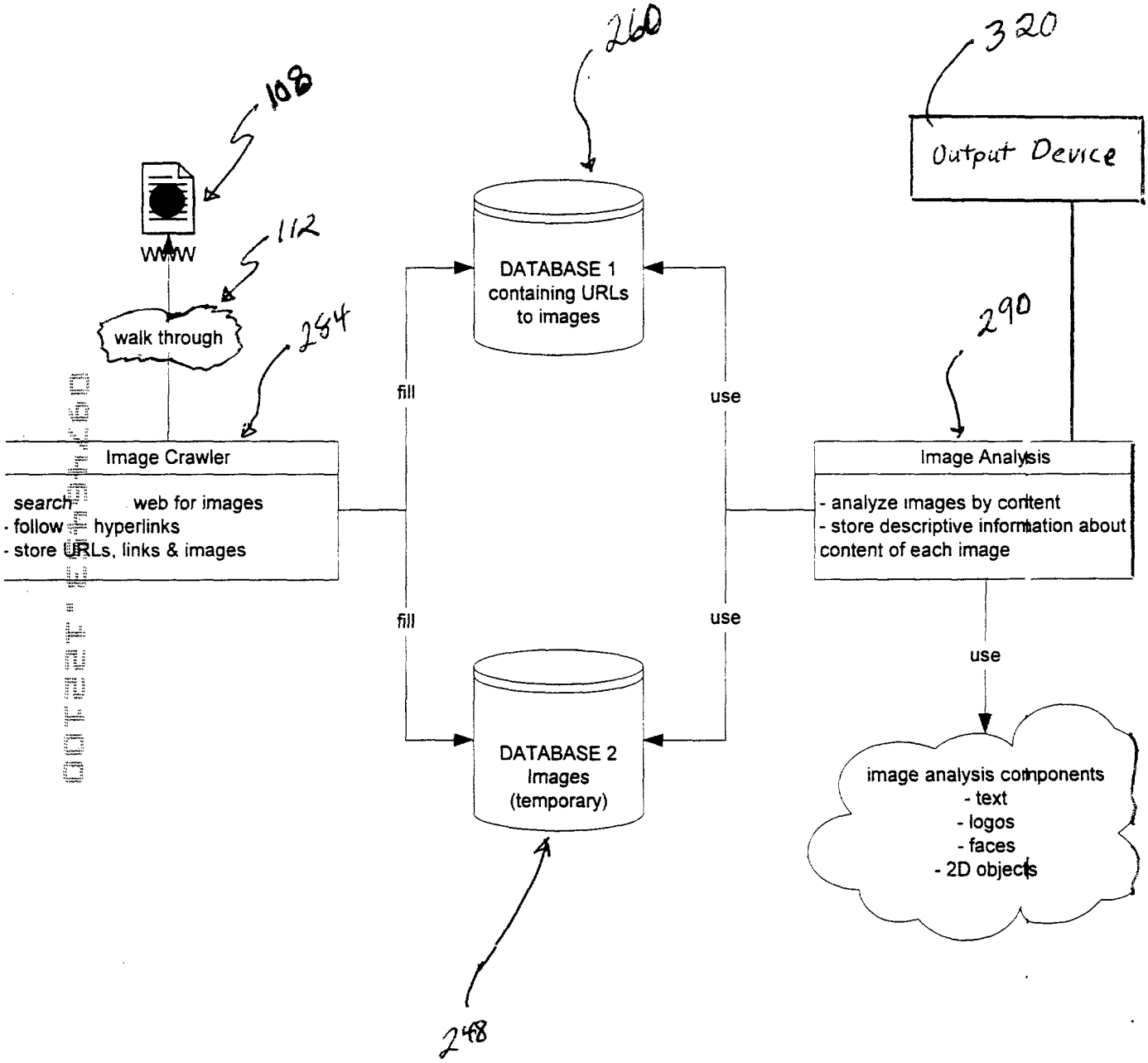

260
320
108
Output Device
112
WWW
DATABASE 1
containing URLs
to images
walk through
254
290
fill
use
Image Crawler
search web for images
- follow hyperlinks
- store URLs, links & images
Image Analysis
- analyze images by content
- store descriptive information about
content of each image
fill
use
use
DATABASE 2
Images
(temporary)
image analysis components
- text
- logos
- faces
- 2D objects
248

Fig 3A

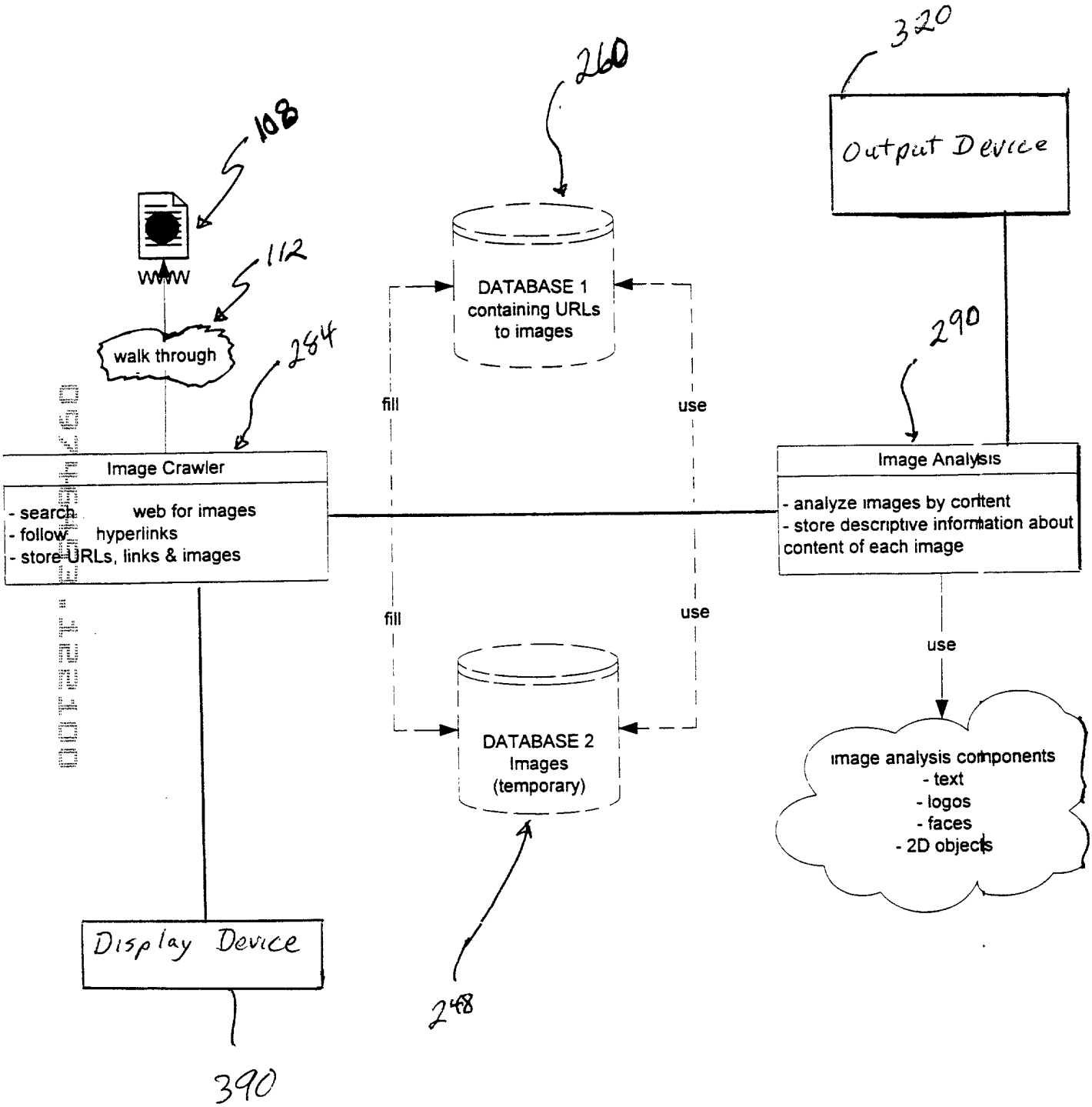

108
WWW
112
walk through
284
Image Crawler
- search web for images
- follow hyperlinks
- store URLs, links & images
260
DATABASE 1
containing URLs
to images
fill
use
fill
use
DATABASE 2
Images
(temporary)
248
320
Output Device
290
Image Analysis
- analyze images by content
- store descriptive information about content of each image
use
image analysis components
- text
- logos
- faces
- 2D objects
Display Device
390

Fig 3B

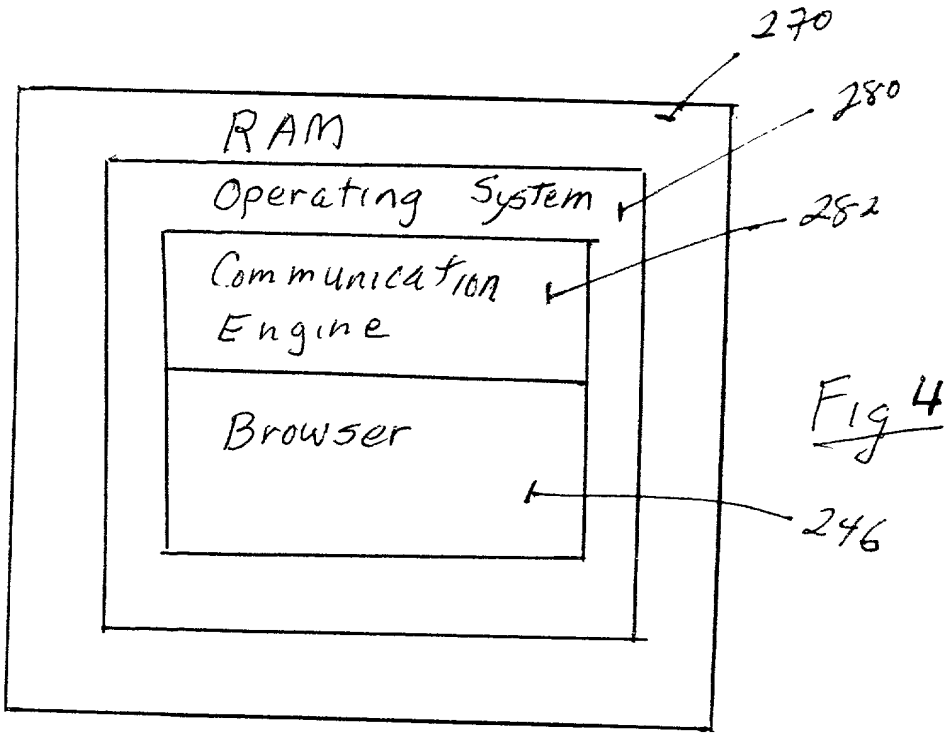

270
280
RAM
Operating System
282
Communication Engine
Browser
246

Fig 4

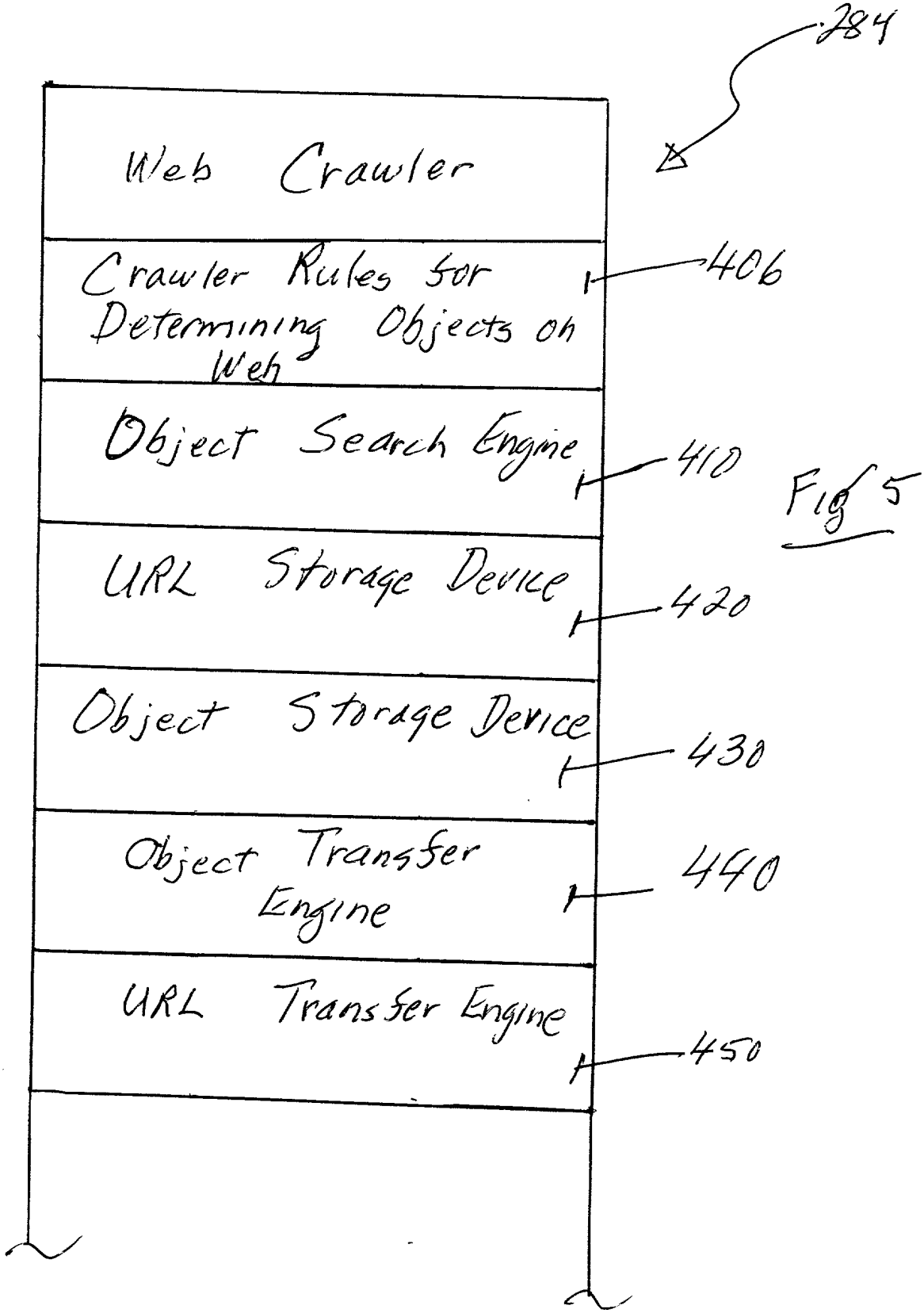


Fig 5

Substitute Sheet

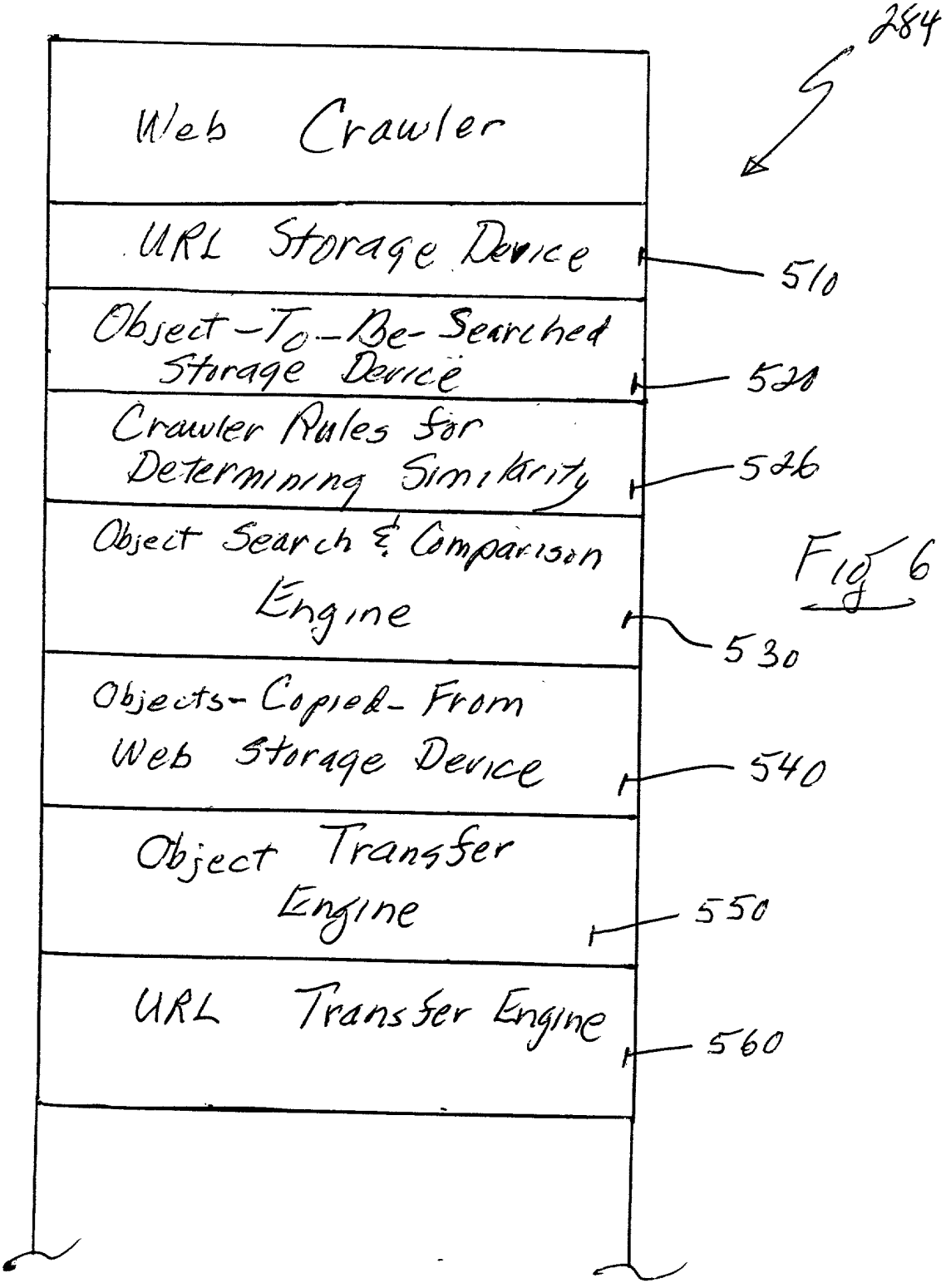


Fig 6

Google - Exhibit 1008

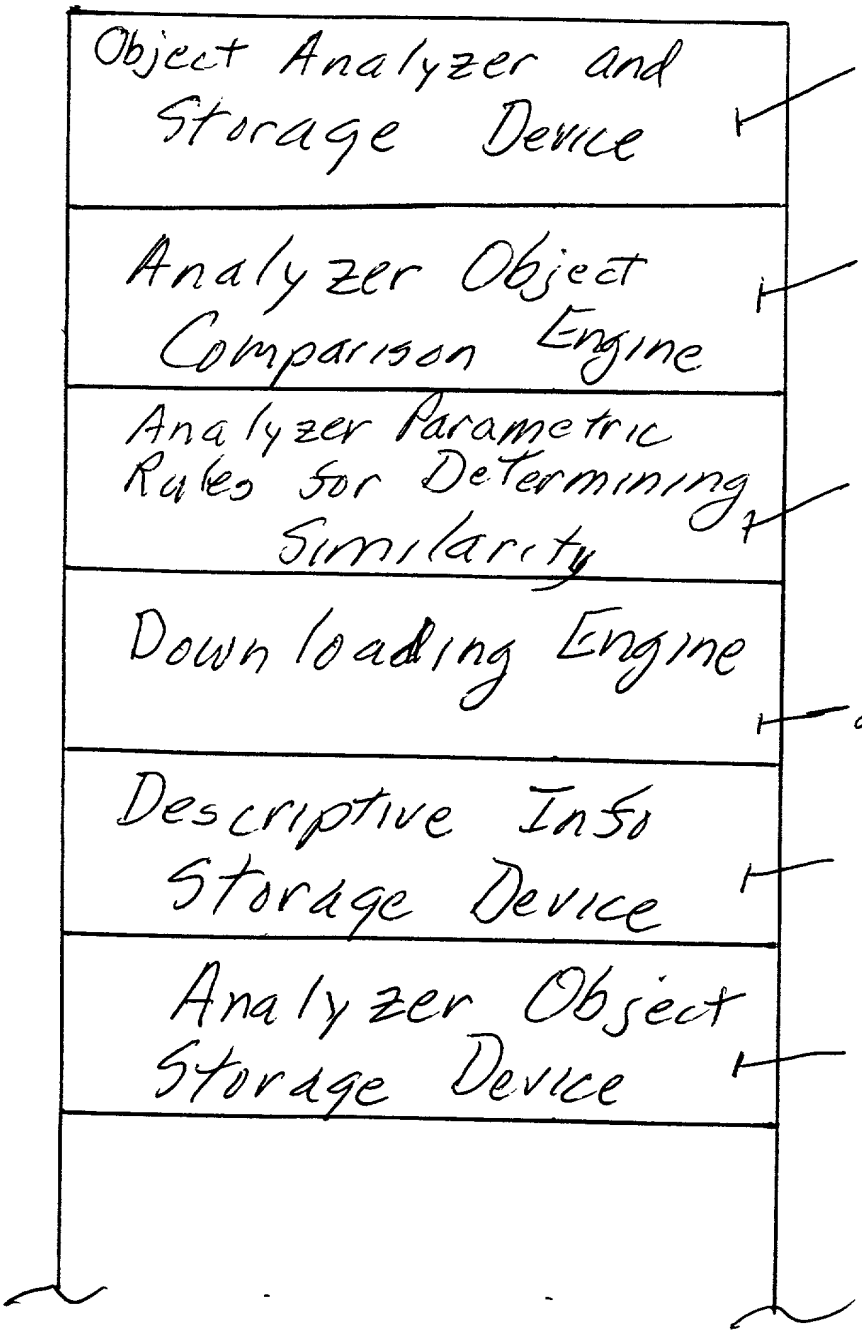

Object Analyzer and Storage Device
290
Analyzer Object Comparison Engine
730
Analyzer Parametric Rules for Determining Similarity
288
Downloading Engine
292
Descriptive Info Storage Device
710
Analyzer Object Storage Device
720

Fig 7

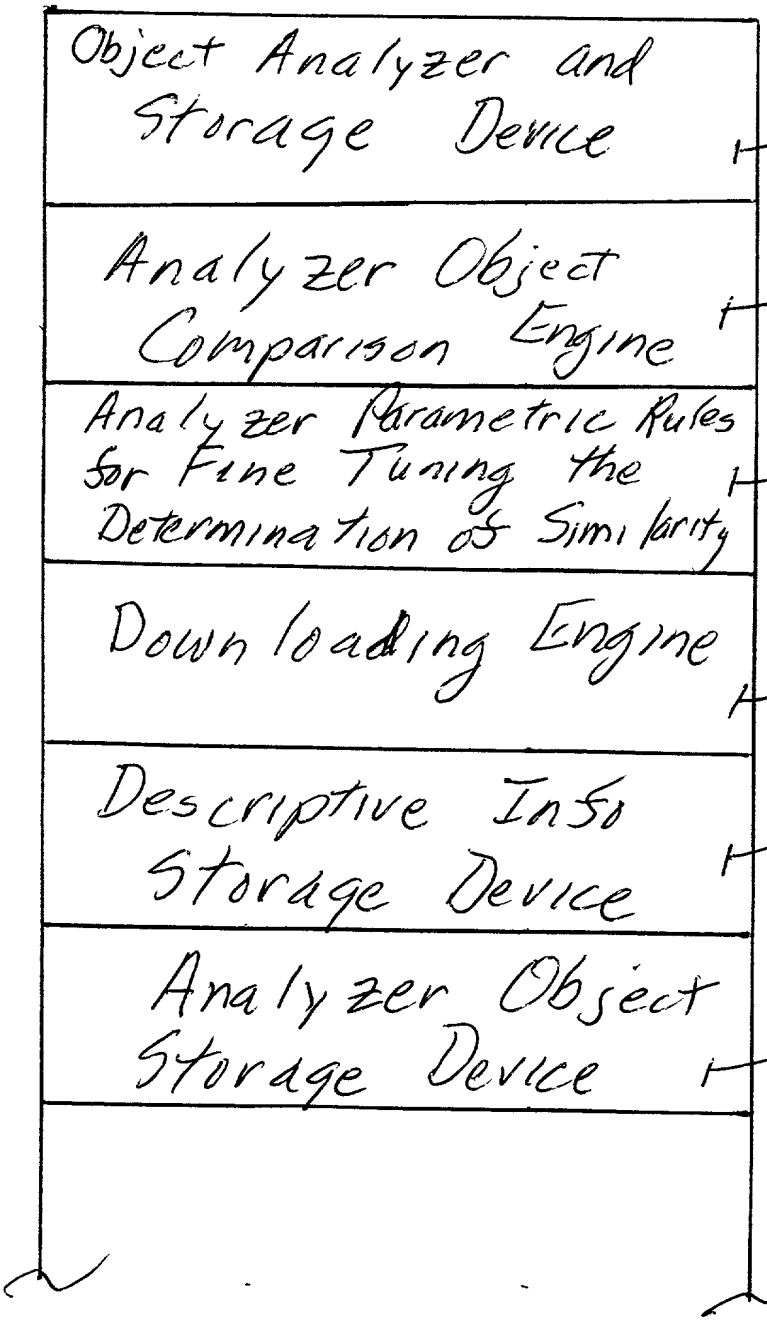

Object Analyzer and Storage Device
290
Analyzer Object Comparison Engine
830
Analyzer Parametric Rules for Fine Tuning the Determination of Similarity
840
Down loading Engine
292
Descriptive Info Storage Device
710
Analyzer Object Storage Device
820

Fig 8

Web Crawler (walk through 112)

Internet

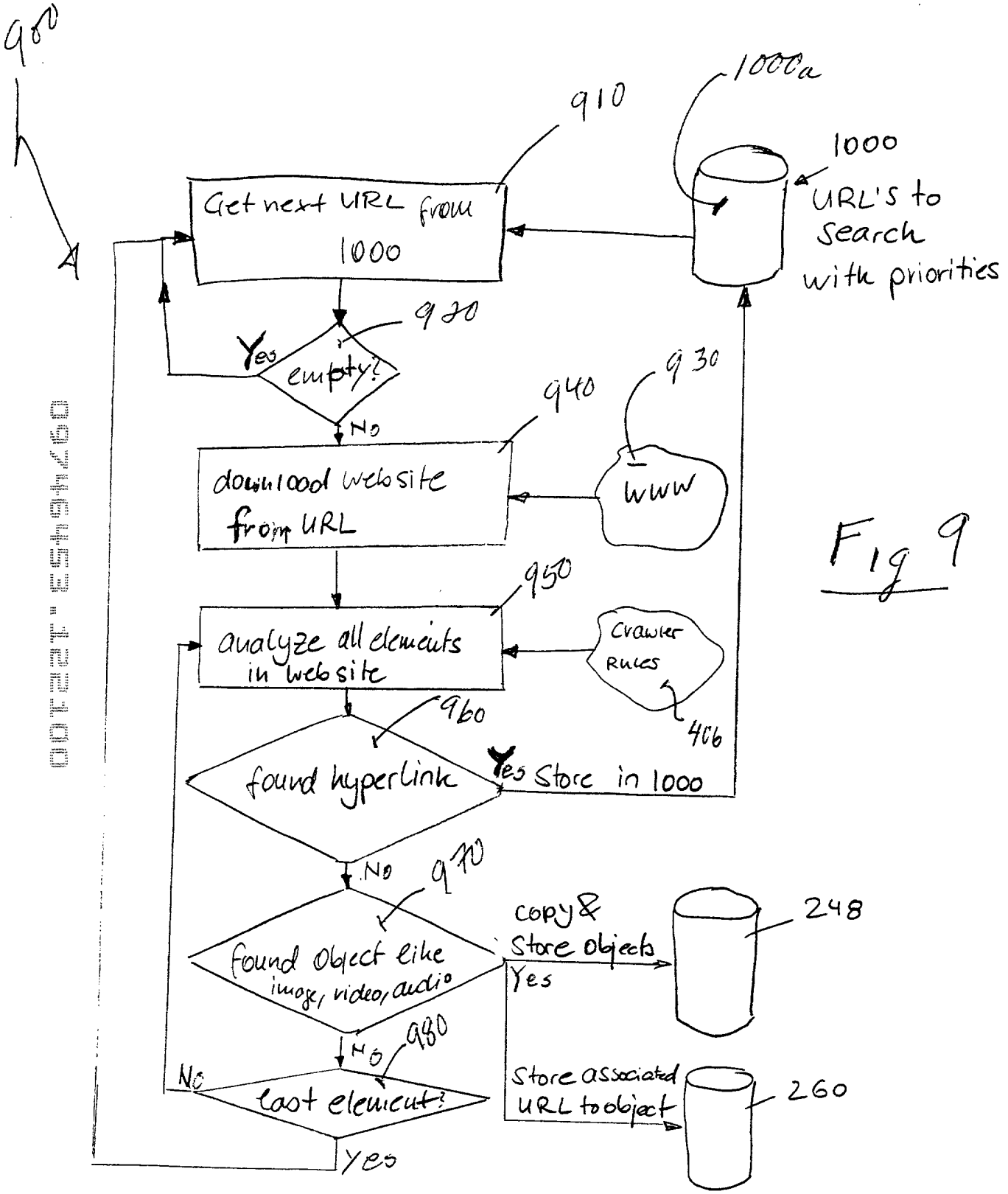


Fig 9

Object Analysis Process 1007

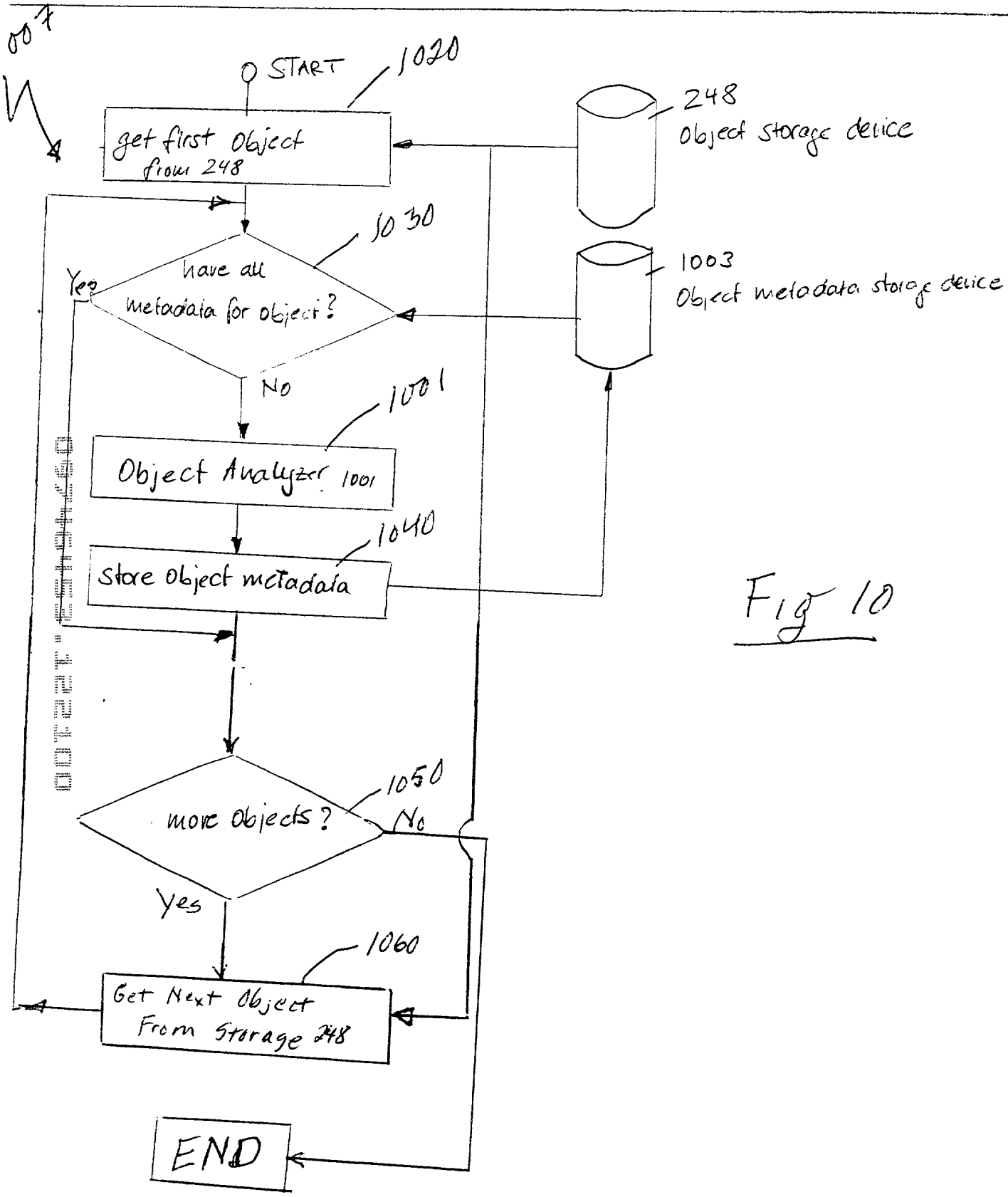


Fig 10

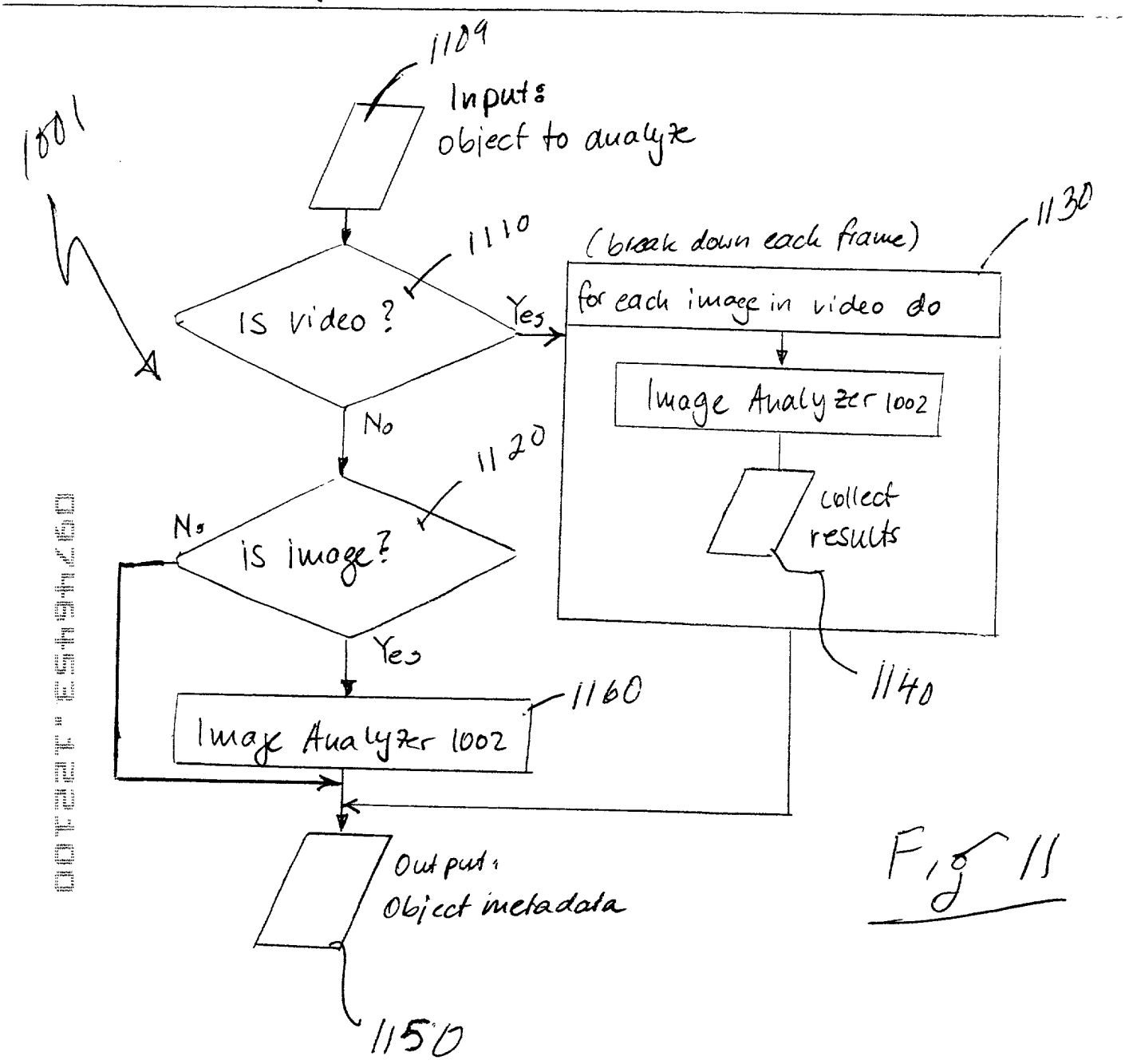

Object Analyzer 1001
1109
Inputs:
object to analyze
1001
1110
IS video?
Yes
No
1130
(break down each frame)
for each image in video do
Image Analyzer 1002
collect results
1140
1120
is image?
No
Yes
1160
Image Analyzer 1002
Output:
Object metadata
1150

Fig 11

Image Analyzer 1002

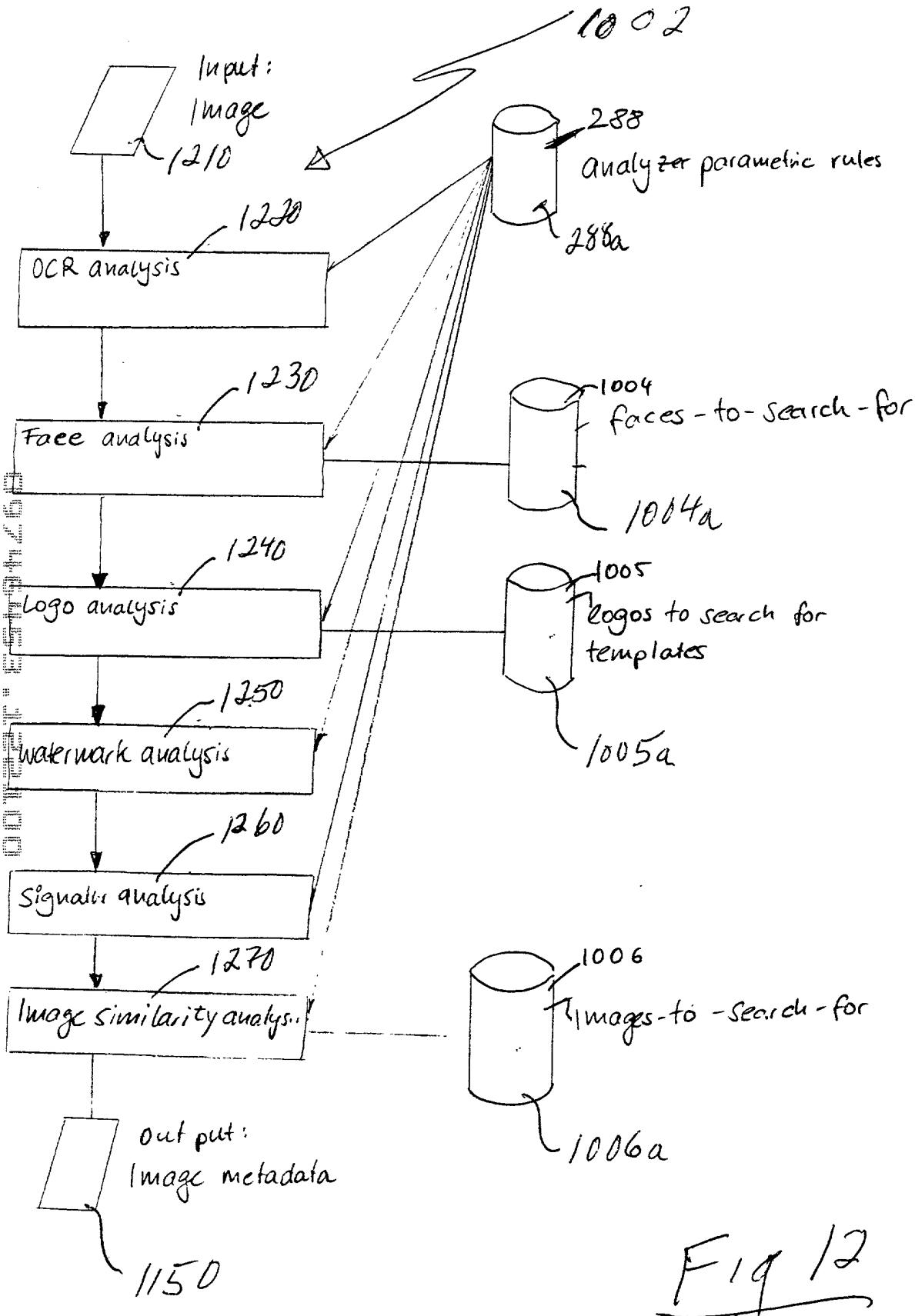


Fig 12

Logo Search (offline)

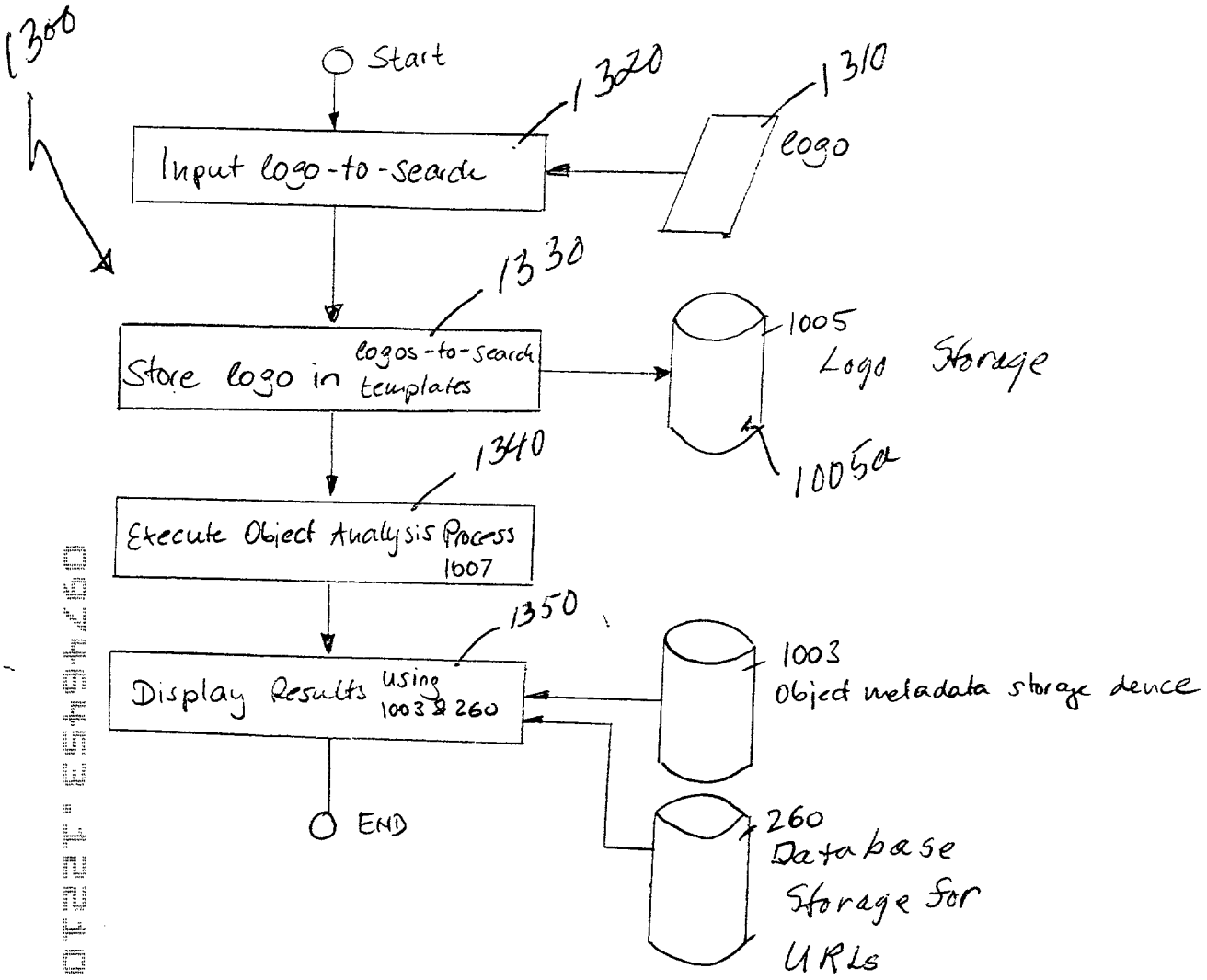


Fig 13

Web Crawler with Object analysis 1008

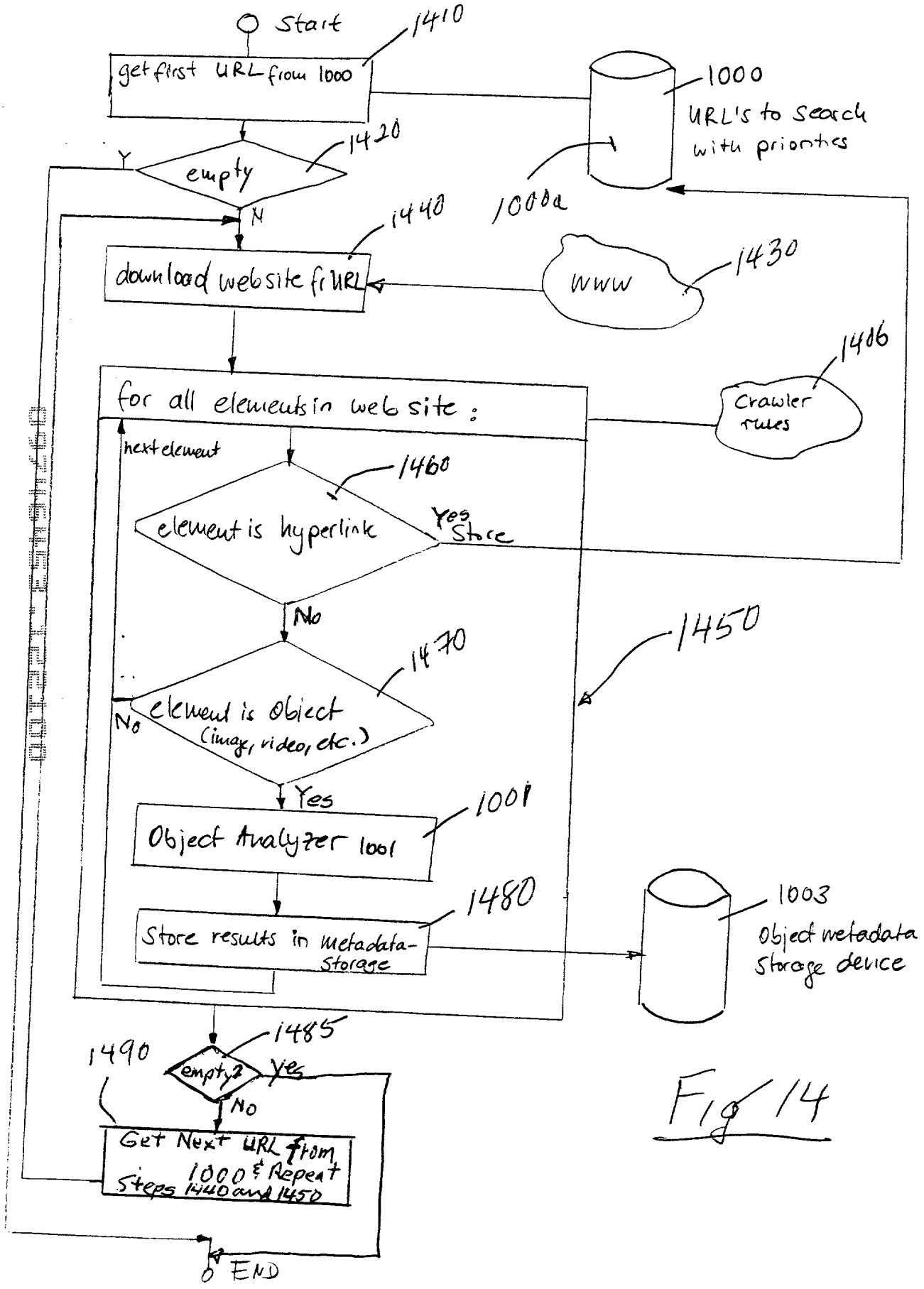


Fig 14

Adding URLs on demand

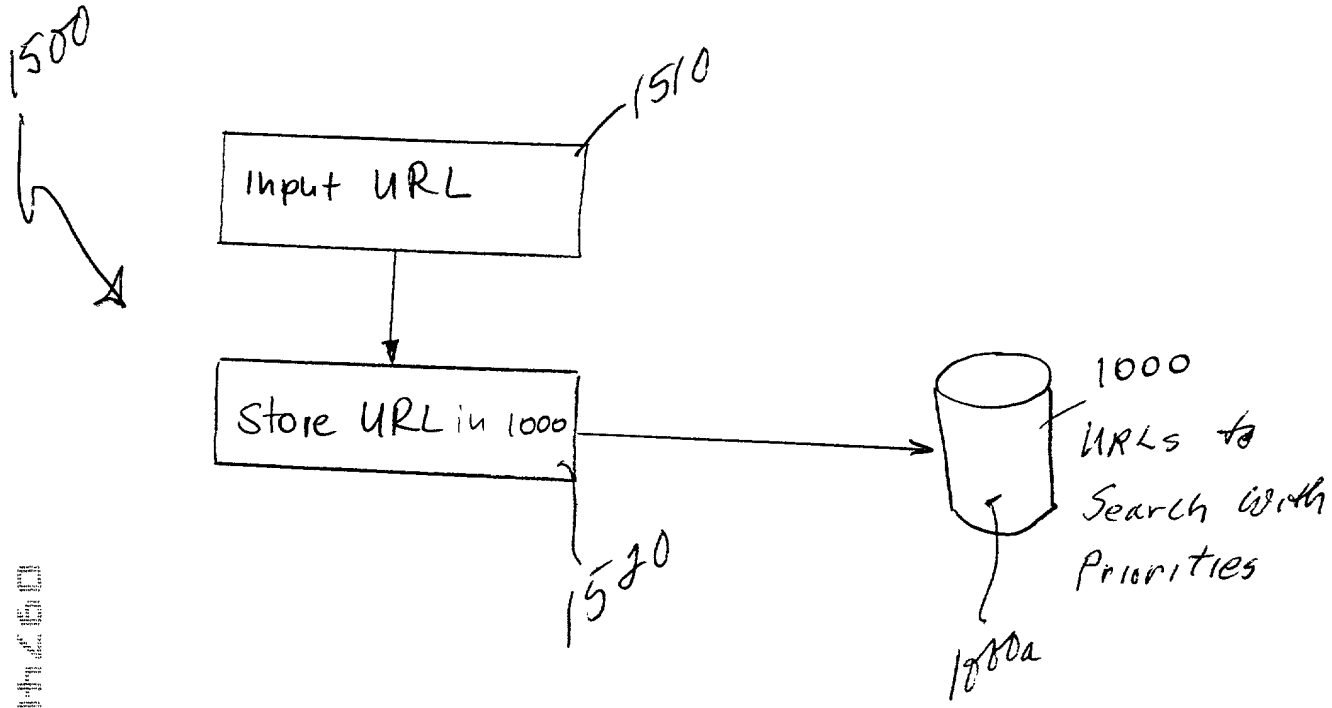


Fig 15

Google Exhibit 1020

Logo Search (online)

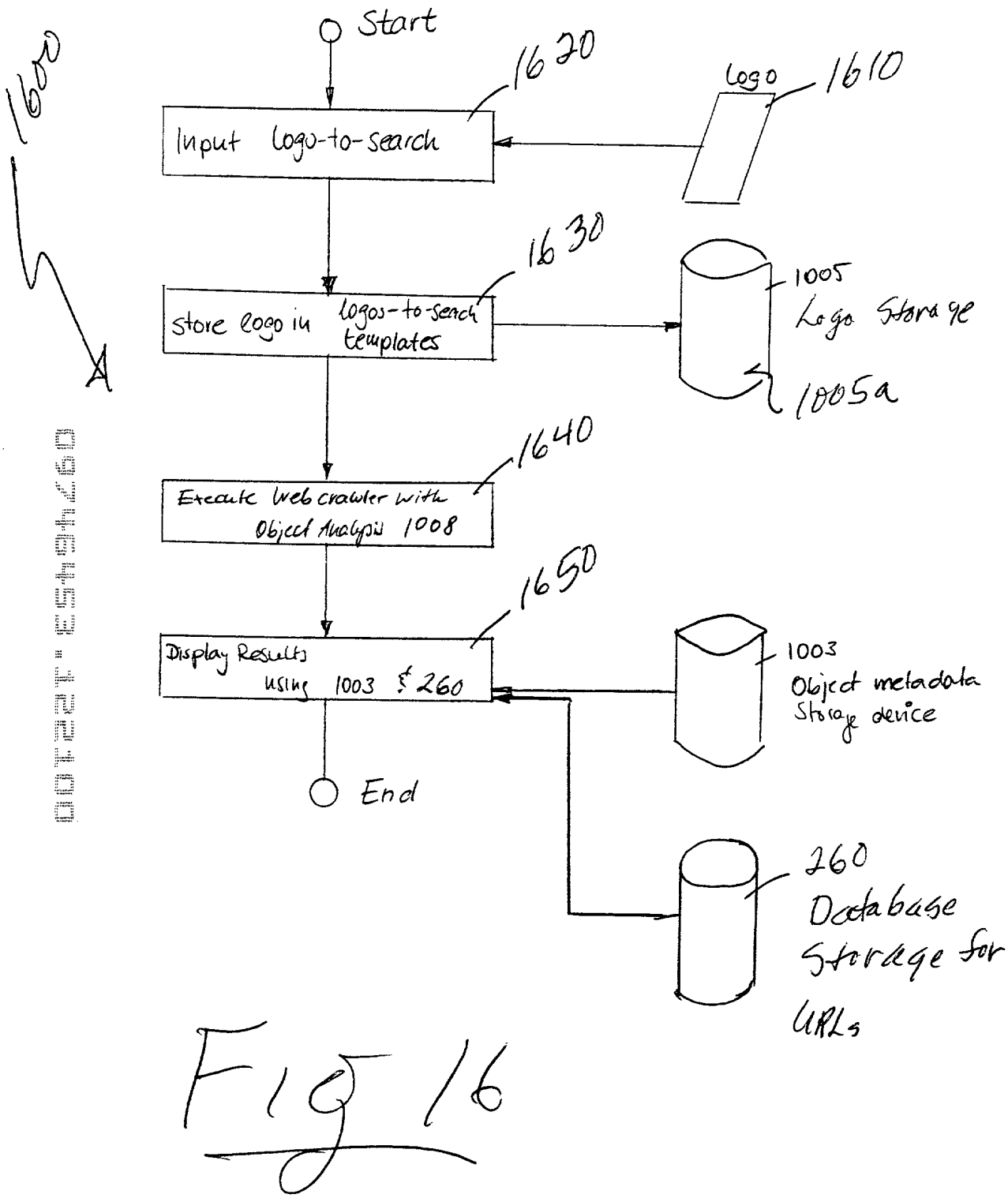


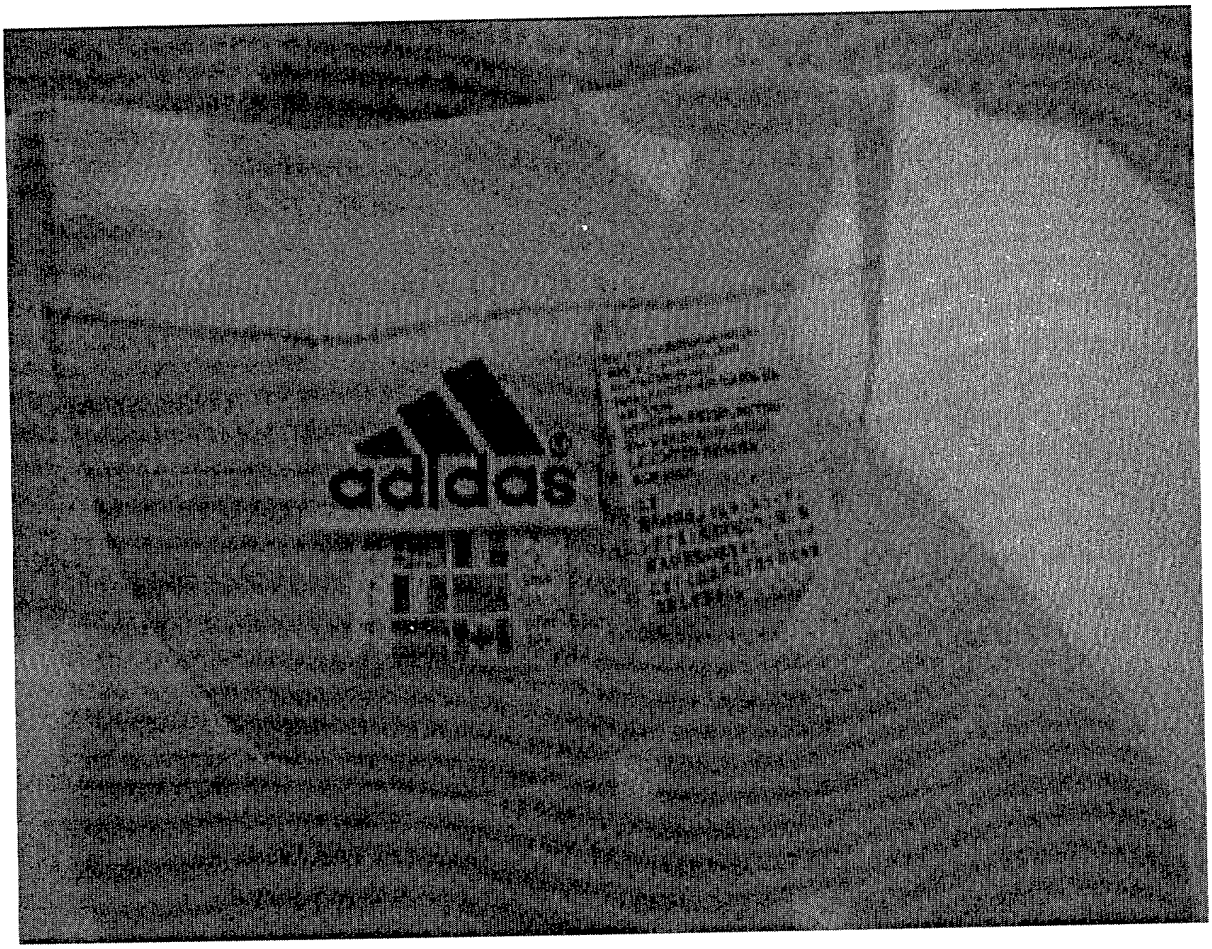
Fig 16

HTML page

tshirt.jpg (id=970729)

Fig 17

Doc-Nr: 3 Page 2 of 3



Logo to search for (id = 10001)

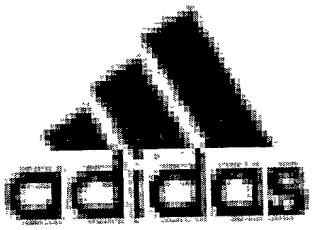


Fig 18